HENRY STEWART TALKS

Libraries in a Digital Age
"Access"

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Word cloud

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Library access in the digital age

- What is access?
- Advocacy and ethos
- Accessible environment
- Accessible documentation
- Access tools
- Alternate formats
- Flexible access to e-resources
- Conclusions

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What is access?

- Enabling library users to get to information more easily, or at all
- This covers:
  - Users with disabilities or impairments
  - Users with geographical barriers
  - Users with technological familiarity barriers
  - Users with library familiarity barriers

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Advocacy and ethos

- Libraries are designed to be accessible to all, it is in our ethos
- Libraries must move with the times to remain relevant
- Libraries have a role to demonstrate the art of the possible

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Library accessibility maturity model

Luck: "With luck we won't have any disabled users"	Tokenism: "Click here for a text-only version of our catalog"	Specialism: "Do you have a disability? Here are the special services we offer"	Standards: "Everything we do abides by access guidelines"	Ownership: "Staff are trained to be flexible, creative and adaptable"	Partnership: "A range of users - including disabled users - work with library staff to develop best practice"

Level of risk

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Libraries as innovators in access

• The libraries who embrace new technologies
can offer greatly enhanced accessibility, for example:

– Twitter/SMS

▪ Notifying users of new titles, new services, seeking feedback,
providing real-time guidance
(Good discussion of Twitter potential http://bit.ly/dvW3s;
List of free SMS services for libraries http://bit.ly/24XJm)

– QR/RFID

▪ Used for reserving books, navigating around buildings,
offering tailored advice on new titles, suggesting e-alternatives
(such as University of Bath http://bit.ly/cDoWB9)

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Approaching accessibility

• Do not be afraid to add value in different ways
for different users

• Broadening the range of media in which information
is provided will almost always increase overall accessibility,
even if specific channels are not fully accessible

• Accessibility has to be taken as an overall provision

• Try to focus on better ways of presenting information,
or improving usage of resources, rather than fixating
on a specific group of user needs

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Accessible environment

• Many library environments are legacies of a previous era
where accessibility was barely on the agenda

• Most libraries have thought about physical access
for wheelchair users

• Other environmental factors are less well covered, *e.g.*

– Sufficient distance between shelving units
to allow wheelchair users or children to read the top shelf

– Braille signage

– Adequate lighting

– Scent-free toilets

– Storage for pushchairs, 'noisy rooms',
water bowls for guide dogs, *etc.*

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Inaccessible environments

- If access issues remain, ensure they are flagged to users in advance
- Advertise any support available for disabled users, those with geographical impairments (*e.g.* online services), those lacking in confidence with technology *etc.*
- Signage is key – provide clear maps and directions as often as possible
- Ensure key resources like photocopiers and internet access terminals are accessible to everyone

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Technical *vs.* Practical accessibility

- Challenge assumptions about access
- Just because something is technically accessible doesn't make it practically accessible
- For example in an accessibility trial of e-book delivery systems, JISC TechDis found that although all the systems trialled were technically accessible to keyboard-only users, one took 170 clicks to access an e-book
- www.jisctechdis.ac.uk/ebookplatforms

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Types of barriers

- Perceptual barriers are those where users are unable to find something in the library that is known to be present – a weakness in signage or if online, a weakness in usability or accessibility
- Usability barriers occur where access is technically possible but impractical – see previous example where browsing to a book and reading three pages took over 100 keystrokes on two of the platforms tested
- Technological barriers are due to incompatibilities between the library's systems and the user's [assistive] technology – *e.g.* text not being readable by their screen reader; or OPAC not being accessible on a mobile device *etc.*

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Accessible documentation
www.jisctechdis.ac.uk/accessibilityessentials

- Structured Word documents make the most difference

- PDFs can be made accessible

- If we can get accessible documents right, all of the time, we will improve accessibility immensely

- It is the easiest and most effective adjustment to make in any library

JISC TechDis
Accessibility Essentials
The Complete Series
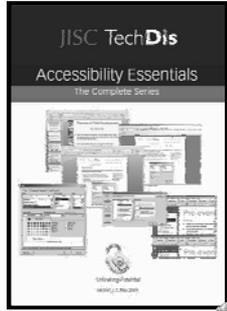
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Best practice with fonts and colour

- Ideally when creating materials online allow users to select according to their own preferences

- The chosen font (for on-screen) should be Sans Serif and be no smaller than 12 point

- Avoid large amounts of underlining, capitalising or italicising

- Try to achieve good contrast without the glare issues of black on white

- Increase font depth for light text on dark background

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Use of styles and formatting

- Using heading styles in Word documents is a quick win

- Documents structured using heading styles generate a full nested document map (accessed *via* view menu)
  - Provides overview of document
  - Clickable to aid navigation
  - Accessible to screen readers
  - Helps generate an adaptable table of contents
  - Headings port through to PDF as bookmarks

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Use of images

- Ensure alternative text is applied to any images
  in electronic documents; Use the Alt. Text to describe
  the purpose of the image (don't just say "map showing
  the fire exits from the second floor", say "map showing
  that the fire exits on the second floor are *via* the main
  staircase or the emergency stairs located behind
  the European History shelves, to the left of the photocopier")

- It is both possible and very useful to create text versions
  of all images used online, particularly maps/floor plans

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Accessibility benefits of PDFs

- Reflow
  - Reflows the text of a document written in columns
    so that it flows all the way across the page;
    Easier to read on screen – reduces the need
    to scroll up and down
  - BUT depends on the reading order being tagged properly
    when the document is created - needs to be checked

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Accessibility benefits of PDFs (2)

- Automatically scroll
  - Automatically scrolls through document, speed controlled
    by up and down arrows
- Read out loud
  - Whole document or current page only;
    Voices can be changed (edit>preferences>reading)
  - NB reading order needs to be checked
- Accessibility preferences
  - Allows reader to customise the document;
    Useful but limited to font and background colours

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Accessibility benefits of PDFs (3)

- Page view
  - Shows each page as a series of thumbnails – useful when looking for a particular image, allows reader to find it quickly
- Bookmarks
  - Similar to document map in Word – allows faster navigation through the document, reader able to jump to specific sections *etc.*; Structure of Word documents picked up when converted to PDF format

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Access tools

- For many users libraries can be less a place of opportunity and more a place of difficulty as they struggle to extract meaning from text, lack skill in note taking, lose track of the resources they've consulted or lack confidence in ordering the acquired information in a meaningful way
- There are, however, a wide range of free tools that can support users in all these areas and more

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Access tools examples

- Text to speech to read text aloud or convert it to MP3 for portable listening
- Reference and research tools that help users organise, assemble, reference and comment on a wide range of resources
- Mind mapping tools that allow ideas and information to be moved, reordered, prioritised and linked in a very visual way
- Voice recording for making audio notes
- Voice recognition systems for converting voice to text
- Magnification tools for users with low vision

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Access tools recommendations

- Do not limit these technologies to only 'disabled users' – everyone can benefit from them

- Choose tools that have a shallow learning curve – users do not spend enough time in the library to warrant persevering with complex tools

- Ensure all library staff are familiar with the tools (not just 'designated' staff) – many of the staff themselves may benefit

- Market what you have – show users clearly what technologies are available for them; They may be unaware of what is possible

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Access tools: where to get them?

- You can find a good list of useful tools at: www.jisctechdis.ac.uk/techdis/investinyourself/freeresources

- A bundle of useful access software that can be installed onto a memory stick (and therefore sufficiently flexible for library users to use on any PC) can be found at: http://portableapps.com/

- For more 'disability' oriented freeware, see: http://www.dot-communications.org.uk/243

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Alternate formats

- Many users benefit from having materials in alternate formats

- Obvious beneficiaries include blind and visually impaired users, but dyslexic users and mobility impaired users may also find benefits

- However, the whole area of alternate formats is fraught with myth and misinformation; This is not necessarily because it is difficult to obtain alternative formats but because the ease with which these are obtained and used is very context sensitive

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Appropriate alternate formats

- Publishers can supply electronic formats in a variety of forms; Of course there are the well-known e-books (based on the EPUB format) that can be purchased alongside traditional hard copy formats

- For disabled users, publishers may also be able to supply (often for free or a nominal charge) PDF versions of texts not available in e-book form (Check the text is selectable, not simply an image of the paper version)

- Software such as Dspeech and free web-based services like Robobraille will convert text-based documents into spoken MP3 files

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Obtaining alternate formats

- Use www.publisherlookup.org.uk to find appropriate contact details at the publisher, to avoid being passed around

- Read guidance on obtaining alternate versions, such as: http://www.jisctechdis.ac.uk/techdis/resources/detail/goingdigital/Guide_Obtaining_textbooks_AltFormats

- Ensure you know how to make the most of PDF documents using the free Adobe Reader – see for example 'Making the most of PDFs' at: http://www.jisctechdis.ac.uk/AccessibilityEssentials/

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Flexible access to e-resources

- Providing online access to resources aids those with geographical access issues, those with small children that they are reluctant to bring into the library, those with mobility difficulties, those who need access out of hours

- Providing mobile access aids many more potential users and can win back those alienated from the 'dusty' library

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Enhancing access in developing and transition countries

- FOSS tools can be key to enabling the digitisation of libraries
- Koha, Evergreen, ABCD as Integrated Library Systems for larger libraries, OpenBiblio for smaller libraries with limited technical capability
- DSpace, EPrints, Greenstone for digital library/digital repository software

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Other FOSS library tools

- SubjectsPlus – guided search tools
- Blacklight/Apache Solr – faceted search
- SimpleSAMLphp/Shibboleth – federated access
- Once the ball has started rolling, FOSS can be used to further enhance access *e.g.* Koha Virtual Union Catalogues
- For case studies and links to instances of use, see: www.eifl.net/foss

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Accessible library policy

- Many library services have excellent accessibility practices but inevitably these are often linked to one or two individuals with relevant experiences or with a particular passion for inclusivity; To move from 'accidental excellence' to structural excellence accessibility needs to move from practice to policy and this inevitably ties in with other organisational policies and procedures

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Policy recommendations

• It is good practice for libraries to have an active accessibility policy or statement – *i.e.* committing the library to specific targets, rather than passively espousing an 'ethos' of accessibility

• Resource acquisition – library staff need to be aware of their user base and whether e-books may be more suitable than hard copy versions

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Benchmarking

• The online accessibility self evaluation service (www.jisctechdis.ac.uk/oases) is a self assessment and benchmarking tool for a variety of roles in academic institutions, of which one is tailored specifically to academic libraries

• The survey takes about 20-30 minutes to complete and enables you to assess your library's practice and anonymously benchmark your practice against other academic libraries who have taken the survey

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Development opportunities

• ITQ in Accessible IT Practice
  – www.jisctechdis.ac.uk/itq
• OU H810 "accessible online learning: supporting disabled students"
  – Masters level module
  – Can be taken standalone or as part of masters in online and distance education
  – http://www3.open.ac.uk/study/postgraduate/course/h810.htm

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Conclusions

- Every library can and should move forward on accessibility
- Do not think of accessibility as benefitting particular user groups, think of it as improving services/practice for all
- Small steps forward are still valid steps, do not think everything has to be large scale
- User feedback is invaluable in identifying what needs to be done, establishing priorities, and assessing whether it has worked

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